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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
KAROL, JODY LYNN	

ART UNIT	PAPER NUMBER
1617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,872	HATHAWAY ET AL.	
	Examiner	Art Unit	
	JODY L. KAROL	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-21* is/are pending in the application.

4a) Of the above claim(s) *4-6 and 9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 7-8, and 9-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/17/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the Response to Electrion/Restriction filed 1/22/2008. Claim 3 has been cancelled and new claim 21 has been added. Accordingly, claims 1-2 and 4-21 are currently pending.

Election/Restrictions

1. Applicant's election **without** traverse of the species **pergolide** as the first antiparkinson agent, **selegiline** as the second antiparkinson agent, and **VIOXX®** as the COX-2 inhibitor, in the reply filed 1/22/2008 is acknowledged.

Claims 4-6 and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Additionally, claim 3 has been cancelled. Accordingly, claims 1-2, 7-8, and 10-21 are examined on the merits herein in so much as they read on the elected species.

Priority

2. This application is a 371 of PCT/US03/40561 International Filing Date: 12/19/2003. Acknowledgment is made of applicant's claim for domestic priority based on the US Provisional Applications No. 60/436,051 and 60/448/833 filed on 12/23/2002 and 2/20/2003 respectively.

Information Disclosure Statement

3. The information disclosure statement (IDS) filed on 6/17/2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered.

Specification

4. The use of the trademark VIOXX® has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Enablement Rejection

Claims 1-2, 7-8, and 10-21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for **treating** Parkinson's disease and relieving the symptoms of Parkinson's disease, does not reasonably provide enablement for the **prevention** of the Parkinson's disease. The specification does not

enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The test of enablement is whether one skilled in the art could make and use the claimed invention from the disclosures in the application coupled with information known in the art without **undue experimentation** *(United States v. Telectronics, Inc.,* 8 USPQ2d 1217 (Fed. Cir. 1988). Whether undue experimentation is required is not based upon a single factor, but rather is a conclusion reached by weighing many factors. These factors were outlined in *Ex parte Forman,* 230 USPQ 546 (Bd. Pat. App. & Inter. 1986) and again in *In re Wands,* 8 USPQ2d 1400 (Fed. Cir. 1988) and include the following: (1) breadth of the claims; (2) nature of the invention; (3) state of the prior art; (4) amount of direction provided by the inventor; (5) the level of predictability in the art; (6) the existence of working examples; (7) quantity of experimentation needed to make or use the invention based on the content of the disclosure; and (8) relative skill in the art. All of the factors have been considered with regard to the claims, with the most relevant factors discussed below:

(1) The nature of the invention: The instant invention pertains to methods of treating Parkinson's disease, methods of relieving the symptoms of Parkinson's disease, methods of preventing Parkinson's disease, and/or its symptoms, and methods for slowing the progress of Parkinson's disease comprising administering a therapeutically effective amount of the selective COX-2 inhibitor. The instant invention further pertains to the above methods comprising administering a selective COX-2 inhibitor in combination with one or more antiparkinson agents.

(2) The breadth of the claims: Claims 1-2, 7-8, and 10-21 are directed to methods of treating Parkinson's disease, relieving the symptoms of Parkinson's disease, slowing the progress of Parkinson's disease, and ameliorating the progress of Parkinson's disease, comprising administration to a patient in need thereof of the selective COX-2 inhibitor VIOXX® in combination with the antiparkinson agent pergolide, or in combination with the antiparkinson agents pergolide and selegiline. The instant claims are also directed to methods of ameliorating the progress of Parkinson's disease or preventing Parkinson's disease comprising administration to a patient in need thereof of the selective COX-2 inhibitor VIOXX. It is noted that the Applicant defines "treatment" as referring to both the treatment and to the prevention or prophylactic therapy of Parkinson's disease and its symptoms (see instant specification, page 12, lines 22-23). The prevention of Parkinson's disease and its symptoms is a very broad claim that is not supported by the instant specification.

(3) The state of the prior art: The state of the prior art is highly developed with regard to methods involving the administration of antiparkinson agents such as pergolide or selegiline (see US 5,668,117 for example). There is also evidence COX-2 inhibition by administering a COX-2 inhibitor is suitable therapeutic strategy in the treatment of Parkinson's disease (see Teismann, et al., Database Biosis On ACS, Acess. No. 2001-562508 or WO 00/27382 for example). However, there is no evidence in the prior art that the administration of said anitparkinson agents or COX-2 inhibitors would prevent a person from developing Parkinson's disease at some point during their lifespan. In short, the prior art recognizes that administration of COX-2

inhibitors or antiparkinson agents is effective in the treatment of Parkinson's disease, but not in its prevention.

(4) The amount of direction provided by the inventor: There is nothing in the instant specification that would indicate that the current invention is effective in the prevention of Parkinson's disease. The prevention of developing Parkinson's disease is a very broad claim. General guidance for selecting a suitable COX-2 inhibitor and antiparkinson agent, formulating dosage forms of said components, and administering said components is provided in the instant specification on pages 12-15. However, specific guidelines for administering a COX-2 inhibitor, etc. to a patient not yet diagnosed with Parkinson's disease, and measure of indicia with regards to the prevention of Parkinson's disease in said patient is not provided. Therefore, with respect to the instant method, there is a substantial gap between the treatment of Parkinson's disease and the prevention of Parkinson's disease. Consequently a burdensome amount of research would be required by on of ordinary skill in the art to bridge this gap.

(5) Predictability in the art: The prior art does not teach methods of prevention of Parkinson's disease.

(6) The presence or absence of working examples: The Applicant describes 8 examples in the instant specification, illustrating a method of treating Parkinson's disease in patients diagnosed with said disease. The examples do not include patients that have no yet been diagnosed with Parkinson's disease. Rather consistent with the

specification, the examples only teach methods of treatment. Overall, the Applicant fails to provide examples illustrating that the instant methods can prevent Parkinson's disease. Therefore, the practitioner would turn to trial and error experimentation to use the instant methods in the prevention of Parkinson's disease, without guidance from the specification or prior art.

(7) The quantity of experimentation: In the instant case, there is a substantial gap between the treatment and prevention of Parkinson's disease. Consequently, a burdensome amount of research would be required by one of ordinary skill in the art to bridge this gap. In order to utilize the instant methods in the prevention of Parkinson's disease, the skilled artisan would be presented with an unpredictable amount of experimentation to determine, for example, the effective dosage of COX-2 inhibitor in order to prevent Parkinson's disease. Additionally, an undetermined number of experimental factors using a system for preventing Parkinson's disease would have to be resolved by the practitioner and/or patient. These factors are not sufficiently disclose in the instant specification to reasonable provide guidance to utilize the invention as claimed.

(8) The relative skill of those in the art: The skill of one of ordinary skill in the art is relatively high, i.e., Ph.D. and M.D. level technology.

In the instant case, an impermissible burden of undue experimentation is necessary to resolve an effective system for preventing Parkinson's disease. An exhaustive study would have to be conducted, and if a significant percentage of the patients developed Parkinson's disease, the study would have to be repeated.

Genetech, 108 F.3d at 1366, states that "a patent is not a hunting license. It is not a reward for a search, but compensation for a successful conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not vague intimations of general ideas that may or may not be workable."

For the above reasons and analysis of the undue experimentation factors, a person skilled in the art would have to engage in undue experimentation to practice the methods of the instant claims with no assurance of success.

Please note that for the following prior art rejections, prior art is applied to the instant claims in so much as the claims read on methods of **treating** Parkinson's disease or its symptoms.

Second Paragraph Rejection

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 7-8, and 10-21 contain the trademark/trade name VIOXX® (as these claims read on the elected species). Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not

the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe rofecoxib and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al. (WO 00/27382).

The instant claim 18 is directed to methods of slowing the progress of Parkinson's disease and preventing Parkinson's disease comprising administration to a patient in need thereof a therapeutically effective amount of the selective COX-2 inhibitor VIOXX® (rofecoxib). The prior art is applied to these claims in so much as they read on methods of **treating** Parkinson's disease.

Block et al. teaches the administration of a therapeutically effective amount of a combination of $GABA_A$ alpha 5 inverse agonist and COX-2 inhibitor for treating neurodegenerative conditions such as Parkinson's disease (see abstract, page 1, lines 27-30, and page 22, lines 10-16). Block et al. further teaches that the COX-2 inhibitor is preferably rofecoxib (VIOXX®) (see page 33, lines 17-18).

Block et al. does not explicitly teach a method of treating Parkinson's disease comprising the administration to a patient in need thereof a therapeutically effective rofecoxib.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention, to treat Parkinson's disease in a patient comprising the administration to said patient a therapeutically effective rofecoxib using the guidance of Block et al. One of ordinary skill in the art would have a reasonable expectation of success in doing

so because the prior art as a whole teaches treating Parkinson's disease with rofecoxib. Thus, the invention would have been *prima facie* obvious to one skilled in the art at the time it was made.

9. Claims 1-2, 7-8, 10-17, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al. (WO 00/27382) as applied to claim 18 in view of Shapiro (US 5,668,117).

Claims 1-2, 7-8, 10-17, and 20-21 are directed to methods of treating Parkinson's disease, relieving the symptoms of Parkinson's disease and/or ameliorating/slowing the progress of Parkinson's disease comprising administration of a therapeutically effective amount of pergolide, and rofecoxib, and in claims 10 and 21, additionally selegiline. The prior art is applied to these claims in so much as they read on methods of **treating** Parkinson's disease and its symptoms.

Block et al. is described *supra* as applied to claims 16-18.

Shapiro teaches known antiparkinson agents used in the treatment of Parkinson's disease, such as pergolide mesylate and selegiline (see columns 28-30, lines 30-25) in combination with a carbonyl trapping agent in the clinical treatment of Parkinson's disease (see abstract).

Shapiro et al. does not teach COX-2 inhibitors such as VIOXX® (rofecoxib) in the treatment of Parkinson's disease.

However, it would have been obvious to one of ordinary skill in the art to treat Parkinson's disease by administering therapeutically effective amounts of (1) rofecoxib

as taught by Block et al. in combination with (2) pergolide and/or (3) selegiline as taught by Shapiro. One of ordinary skill in the art would have been motivated to combine these components to treat Parkinson's disease because they are individually taught in the art to treat Parkinson's disease. It is obvious to combine individual compositions taught to have the same utility to form a new composition for the very same purpose (See *In re Kerkhoven*, 626 F.2d 846, 205, U.S.P.Q. 1069 (C.C.P.A. 1980)).

In regards to the instant claim 13, where the combination of pergolide and rofecoxib is claimed to provide greater relief than pergolide alone, it is expected that these two agents would have an additive effect because they are both known to be used in the treatment of Parkinson's disease.

In regards to the instant claims 11 and 17, that claim methods of treating the different stages/types of Parkinson's disease, it is presumed that the above components (rofecoxib, pergolide, and selegiline) taught by the prior art, treat all stages and types of Parkison's disease absence evidence to the contrary.

Thus, the invention would have been *prima facie* obvious to one skilled in the art at the time it was made.

Conclusion

No claims are allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JODY L. KAROL whose telephone number is (571)270-3283. The examiner can normally be reached on 8:30 am - 5:00 pm Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

JLK

/San-ming Hui/
Primary Examiner, Art Unit 1617